

## CLAIMS

What is claimed is:

1. A hairbrush with a plurality of filaments which can change color with temperature, comprising:

a handle;

a head which has a number of pre-set filament holes on its surface and is attached to the handle by any convenient means; and

a plurality of filaments each of which is formulated in one piece by extrusion process from plastic material of 98% to 94% by weight plus a mixture of 2% to 6% by weight comprising melamine plastics of 6%, latent dye of 4.5%, fixing agent of 10%, fatty acid of 0.5% and metallic oxide of 79% by weight, and is attached to the filament holes by any convenient means.

2. A method of manufacturing filaments for a hairbrush as claimed in claim 1, comprising the steps of:

preparing a thermochromic composition by feeding melamine plastics of 0.12%, latent dye of 0.09%, fixing agent of 0.2%, fatty acid of 0.01% and metallic oxide of 1.58% and plastic material of 98% by weight into an extruder of a monofilament making machine;

adding heat to melt the materials;

mixing the materials inside the extruder by spinning to form molten polymer;

using the extruder barrel to push the molten polymer out through a nozzle plate to form individual uniform wires;

submerging the wires into water for cooling to form strings of filaments;

steaming the filaments in a hot water bath;

stretching the filaments to a desired diameter;

winding the annealed filaments on a winder; and  
attaching the filaments to the filament holes by any convenient means.